

REMARKS/ARGUMENTS

Claims 1-11, 13-26, 28-40, and 42-50 remain in the application for further prosecution. Claims 1-3, 5, 6, 10, 16-21, 25, 26, 28-30, 32, 37 and 38 have been rejected. Claims 4, 7, 9, 13-15, 22-24, 31, 33-36, 40 and 44 are objected to. The Applicants thank the Examiner for allowance of claims 42, 43 and 45-50. The Applicants also thank the Examiner for withdrawing the rejections based on the combination of U.S. Pat. No. 6,434,509 to Blades ("Blades") and U.S. Pat. No. 6,242,922 to Daum ("Daum").

§ 103 Rejections

Claims 1-3, 5-6, 10, 16-21, 25-26, 28-30, 32 and 37-38 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,625,550 (Scott et al.), in view of Daum. The Applicant respectfully disagrees. As stated in the previous response, the combination of Scott and Daum is believed to be improper. Scott expressly teaches an arc fault detector that distinguishes between normally noisy load currents and arcing currents. Scott, col. 10, ll. 24-27. According to Daum, utilizing such classification techniques is expensive and difficult, which goes against the purpose of Daum. Therefore, the disclosure of Daum teaches away from combining Scott and Daum.

The Examiner claims that the reference to Daum is to show that it was known in the prior art to combine the elements of Scott onto a single ASIC. However, that is not what Daum discloses. Daum discloses eliminating the classification features of Scott, and then combining the structures onto a single ASIC. Therefore, Daum does not stand for the proposition that it was known that all of the features of the present invention could be integrated onto a single chip. Daum discloses eliminating certain features and combining the rest onto a single chip.

The Examiner also cited to *In re Larson*, 340 F.2d 965, 968 (CCPA 1965) as bearing on the case. However, the Applicants believe that the case of *Schenck v. Nortron Corp.* 713 F.2d 782 (Fed. Cir. 1983) is more on point. In that case, the claims-at-issue were directed to a vibratory testing machine that included a holding structure, a base structure, and a supporting means which formed a single integral and continuous piece. *Id.* at 784. The alleged infringer argued that the patent was invalid over prior art that disclosed legs and cross-pieces bolted together with notch-and-tooth engaging faces, and that forming of that structure in one piece was merely an obvious step. *Id.* The Federal Circuit disagreed, citing to prior art that perceived a need for mechanisms to dampen resonance. Because the patent eliminated the need for damping, the patent went against the understandings and expectation of the art.

The present case is analogous. The Examiner is citing to Daum for the proposition that placing the pieces on a single ASIC was known. However, Daum perceives a need of keeping the circuitry simple, including eliminating various features. The present claims, in contrast, go against eliminating certain features, yet still put all of the features on a single ASIC. Therefore, because the claims-at-issue go against the common teaching of Daum, this case is considered to be similar to that in *Schenck*, and the claims are believed to be allowable.

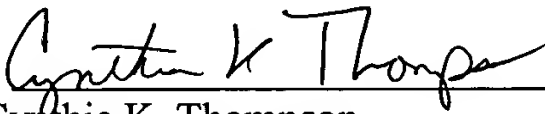
Conclusion

It is the Applicants' belief that all of the claims are now in condition for allowance and action towards that effect is respectfully requested.

If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at the number indicated.

Respectfully submitted,

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